

MEMO

TO: DAVID HARLOW, CHRIS BEALE, KRISTY CHEW
FROM: JOAN TAYLOR
RE: Draft Approach to Structuring the Preliminary Conservation Strategy;
DATE: JULY 26, 2011

Reserve design principles

An overarching concern is that the draft DRECP strategy is calculating the amount of energy development (hence acreage disturbance) that will occur in the Plan area. Development is apparently the driver, with conservation left to react as best it can. This is backwards.

As an HCP/NCCP, DRECP should first develop a conservation plan based solely on what the conservation needs of the species and natural communities are, including ecological processes and movement corridors, including adequate habitat, buffers and landscape level movement corridors to address climate change effects.

Simultaneously, DRECP could take a different approach to the development side of the equation: namely, delineate criteria for identifying the most suitable areas for energy development (e.g. disturbed land, proximity to existing transmission corridors, proximity to load, etc.). Let that analysis develop estimates of acreage suitable for energy development, rather than planning to accommodate a calculated “need” for renewable acreage.

But instead of letting conservation be the driver, the draft proposal is to put as much as possible of the assumed development acreage in low conflict areas and then “distribute the remaining impacts” (of presumed development) in areas where there are biological conflicts.

Independent Science Advisors Report

With regard to several core principles and tools, DRECP is departing from the unequivocal recommendations of the Independent Science Advisors (ISA) Report. Environmental stakeholders have outlined their concerns about consultants’ use of fundamentally inadequate maps as well as models that are inconsistent with best science advice available. I will not reiterate those objections here. But please note that one of the reasons that the Coachella Valley MSHCP was so broadly embraced is that it was very much science driven and peer reviewed. DRECP should revise its proposed approach with regard to data, modeling and reserve design to reflect the ISA advice.

Exclusions

The drafts only speak to implementing exclusions identified by RETI or other planning processes, such as BLM’s Solar PEIS. If indeed DRECP is adopting RETI exclusion definitions and other RETI-generated metrics this is a serious concern.

The merit of RETI reports and products was broadly questioned by environmental organizations as well as local government.

For instance, virtually all conservation organizations asserted that ACECs designated for their significant biological resources should be excluded from development. RETI failed to exclude ACECs.

Nor do the proposed exclusions follow the ISA recommendations, wherein many areas are proposed for total or nearly total avoidance:

- ___ Unique Plant Assemblages as identified in Section 2.4.1.
- ___ Special Features, as identified in Section 2.7.
- ___ Areas of known importance to key covered or planning species, including at least the following:
 - desert tortoise critical habitat
 - bighorn populations and linkages
 - “core populations” and hypothesized linkages for Mohave ground squirrel
 - populations of species that are endemic or near-endemic (e.g., over 75% of total distribution) to the planning region
 - known habitat or populations of other species that are determined to be at high risk of extinction within the planning region
- ___ Linkages between core habitat areas identified by any of the following: the California Desert Connectivity Project (Penrod et al., in preparation), South Coast Missing Linkages Project (Beier et al. 2006, South Coast Wildlands 2008) and California Essential Habitat Connectivity Project (Spencer et al. 2010).
- ___ Habitat predicted to be essential to accommodate distributional shifts, in response to climate change, as predicted based on existing (e.g., Wiens et al. 2009) or future models.
- ___ Areas important to maintaining dynamic geological processes, including eolian sand sources, wind corridors, and settling areas.
- ___ Hydrologically important areas (e.g., washes, groundwater recharge areas, springs, seeps, etc.), including first- through fourth-order washes and washlets.

Can we assume that the exclusion list is the only RETI product to be embraced by DRECP? If not, please identify the other product(s) and their intended use, providing adequate time for stakeholder review and comment.

Transmission

New transmission (and ancillary facilities), being linear, are generally less impactful than actual renewable energy projects. However, transmission should not be included as an acceptable use in areas such as National Parks, National Monuments and designated wilderness areas where it is not now acceptable. Nor should it be permitted in conservation areas or portions of them that would have sensitivity to such facilities.

Conservation and compensation measures

The statement is made: “The conservation strategy structure will employ species-specific and landscape-, habitat- and ecological processes-based conservation and compensation measures, as appropriate depending on the impacted resources.”

This statement is very open to future interpretation, leaving one without a clear idea as to how the conservation strategy/plan will be implemented. Perhaps that is what is intended at this juncture.

But, again, if this is to be an HCP, it needs to be very clear and explicit so there are no surprises later and, more importantly, so that there is a clear implementation plan that demonstrates beyond a doubt that the conservation side of the equation will occur. It seems pretty obvious that the development side of the equation is intended to be facilitated by DRECP. However, it doesn't work if it isn't totally clear how the conservation side happens, and that it is adequate to ensure the long-term persistence of covered species and natural communities.

Department of Defense lands

There seem to be mixed signals coming from DRECP with regard to the above. The draft Effects Analysis document assumes that, other than transmission, there would be no utility scale renewable generation developed on DOD lands. This seems inconsistent with DOD's mandate to pursue energy independence. There are a number of current active large DOD renewable energy projects, per the report of stakeholder Major Ernie Govea to DRECP and other sources. Moreover, DOD units may present some opportunities for ramping up renewable energy in lower conflict areas. DRECP should not dismiss the potential for utility scale projects on DOD lands out of hand.

Impacts assessment/levels of take

The drafts focus on ground disturbance as the primary foundation for measuring levels of take, acknowledging there are other impacts to be considered. However, habitat fragmentation is barely mentioned, if at all, and it is an especially important metric for the Plan, given the need to provide adequate viable habitat as well as landscape level habitat connectivity both for genetic viability and for climate change adaptation. This is additionally important in light of the wind industry's proposals for massive deployment in the Plan area, and the habitat fragmentation caused by wind farms.

Encroachment into conservation areas

It is proposed that encroachment limits into conservation areas be determined by algorithms. I do not believe it has been determined whether or not the reserves will be able to accommodate any further level of disturbance than what currently exists. But for the sake of argument, assuming that determination is made, the algorithm approach has its own limitations. Per the ISA Report, “Use of algorithms must be augmented by attention to reserve design principles, and expert knowledge on species life histories, ecological processes, and other factors that determine viability of species and sustainability of ecosystem functions.” [Note that the ISA Report considered use of

algorithms for reserve design, not reserve disturbance, but the advice would presumably hold true for the latter use as well.]

Climate change

Providing for climate change adaptation gets short shrift in the draft approaches. However, the fact remains that climate change must be accommodated in order to produce a viable conservation plan, particularly in view of the scale of DRECP. There are many variables that must be planned for, and to exacerbate the situation the California desert is a climate change “hot spot.” Thus it is incumbent upon DRECP to provide landscape level movement corridors for adaptation and movement of both flora and fauna in response to the stressor of climate change.

Development acreage estimates

Notwithstanding the above objections to DRECP calculating development “needs” as opposed to conservation needs, there are some basic problems with trying to predict renewable development acreage. The development acreage calculators are unusually sensitive to assumptions, and the farther out in time one ventures, the more unreliable those assumptions become. Even projecting out to 2020, it is unlikely that the calculators can make assumptions about technological changes, storage, energy costs, etc that are valid.

For example, two years ago, who would have predicted that the Beacon, Imperial, Calico and Ridgecrest solar thermal projects would have switched to PV? And that virtually none of the currently proposed solar projects would be solar thermal? Few believed that world PV production would continue to increase geometrically, driving costs further downward, but this has happened. One clear flaw of both the CEC and CPUC calculators (that we have reviewed to date) is the assumption that renewable technologies will essentially remain stagnant! Even going out 20, 30, 40 years, there are no inputs for deepwater offshore wind, wave energy, enhanced PV with storage, and other advanced or new technologies. This defies logic.

Additionally, the calculators are forced to make huge unsupported assumptions about energy storage, population growth, efficiency, etc. And none of them so far have proposed a scenario that would represent a well designed, predominantly renewable energy grid. In sum, calculating future need for renewable development acreage is not only a departure from DRECP’s basic charge, but attempting to do so has inherent shortcomings.